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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,645

12/13/2005

Joseph Briaire

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08/22/2008

NXP, B.V.

NXP INTELLECTUAL PROPERTY DEPARTMENT

M/S41-SJ

1109 MCKAY DRIVE

SAN JOSE, CA 95131

EXAMINER

JEAN PIERRE, PEGUY

ART UNIT

PAPER NUMBER

2819

NOTIFICATION DATE

DELIVERY MODE

08/22/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/560,645	<b>Applicant(s)</b> BRIARE, JOSEPH	
	<b>Examiner</b> Peguy JeanPierre	<b>Art Unit</b> 2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12.13.05</u>  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement filed on 12/13/2005 has been considered.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. In addition, the preferred layout (Background of the Invention, Summary of the Invention....) of the embodiment of the invention is missing.

### ***Claim Objections***

5. Claim 11 is objected to because of the following informalities: The dependency of claim 11 is suspect. It depends on claim 12. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2819

7. Claims 1-4, 7-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Manganaro (USP 7,161,412).

With regard to claims 1, 9 Manganaro discloses a digital to analog converter that comprises at least two conversion elements, namely current source cells (110) and spare cell (118) (see col. 9, lines 58-65) that are driven by a set of digital control bits (not shown) (see col. 1, lines 20-21), a calibration unit (120) that compensates for mismatch between respective ones of the first and second conversion elements (see col. 17, lines 27-30). The calibration circuit is adapted to perform the mismatch compensation in response to a comparison of an output from at least one of the conversion element with an output from a reference conversion unit see col. 11, lines 32-35 and 47-52). With regard to claims 2-4 and 7-8, 10-11 the calibration circuit is formed by a transresistance amplifier that is configured to compare and determine the difference between the reference current and the conversion element and adjust the conversion element in response to the comparison ( see col. 1, lines 42-49; col. 5, lines 19-24; col. 13, lines 28-42).

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Opris (USP 6,130,632).

Opris further discloses a plurality a comparator (501) that compares a plurality of conversion elements a calibration circuit (502) for calibrating the output of the comparator (see Fig. 5).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5-6 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manganaro (USP 7,161,412)/Opris in view of Berman et al. (USP 7,148,632).

Manganaro and Opris disclose essential features of the claimed invention except for a calibration circuit for adjusting the duty cycle of the current sources. Berman discloses a calibration controller that adjusts the duty cycle of conversion elements (red, green, and blue LEDs) represented by current sources and a microcontroller that measures the plurality of conversion elements (see col. 7, lines 45-62; col. 8, lines 40-52). It is to be noted that the calibration method is to eliminate mismatch between current sources.

The system of Berman increases the duration and intensity of the current sources.

Therefore, it would have been obvious to one having ordinary skill in the art to use the teaching of adjusting the duty cycle of the conversion elements as taught by Berman in the converter of Opris and Manganaro to maintain the intensity of the conversion elements at the predetermined level and accuracy.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peguy JeanPierre whose telephone number is (571) 272-1803. The examiner can normally be reached from 8:00-6:30 PM Monday-Thursday. The examiner's fax phone number is (571) 273-1803. If attempts to reach the Examiner is unsuccessful, the examiner's supervisor R. Barnie can be reached at (571) 272-7492.

/Peguy JeanPierre/  
Primary Examiner, Art Unit 2819